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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/716,018	11/17/2000	Robert Huber	00 P 7777 US 01	6535

7590

05/06/2004

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EXAMINER

KASENGE, CHARLES R

ART UNIT

PAPER NUMBER

2125

DATE MAILED: 05/06/2004

13

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary

Application No.

09/716,018

Applicant(s)

HUBER, ROBERT

Examiner

Charles R Kasenge

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 4/30/04.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4, 11, 13-18 and 20-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 11, 13-18 and 20-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments, see "Remarks", filed February 17, 2004, with respect to the rejection(s) of claim(s) 1-4, 11, 13-18, and 20-30 under 35 U.S.C. 102(e) and 35 U.S.C. 103(a) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Tanaka et al. U.S. Patent 5,172,468 and Miller et al. 6,556,884.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-3, 18, and 20-30 are rejected under 35 U.S.C. 102(b) as being anticipated by Tanaka et al. U.S. Patent 5,172,468. Referring to claims 1, 18, and 20-30, Tanaka discloses a system for managing electronics manufacturing data comprising: a processor (col. 7, lines 44-61); a data storage device operably connected to the processor, the data storage device storing manufacturing standardization data and a plurality of electronic manufacturing data sets, each of the plurality of electronic manufacturing data sets corresponding to a local manufacturing process (col. 7, lines 44-61); and a difference editor executable on the processor to display differences between at least one of the electronic manufacturing data sets and the manufacturing standardization data (col. 7, lines 44-61). The Office interprets Tanaka's attracted condition data

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as manufacturing data, the regular electronic part attracted condition data as the manufacturing standardization data, the controlling unit as the processor, and the memory as the data storage device. Tanaka discloses a manufacturing system and method being applied to printed circuit board assembly lines (col. 6, lines 38-54), at least one placement machine for placing components on a printed circuit board (col. 1, lines 7-13), and the first set of data includes information relating to plurality of electric components (col. 3, lines 16-19). Referring to claim 27, Tanaka discloses the method as recited in claim 26 wherein the displaying step includes displaying a graphical representation of an electronic component and highlighting the differences (col. 6 and 7, lines 56-68 and 44-61).

Referring to claims 2 and 3, the data storage device includes a server for providing the manufacturing standardization data. The Office interprets Tanaka's memory device as a storage device, or server. Tanaka discloses the system as recited in claim 2 wherein the data storage device further includes a control system for providing a first of the plurality of electronic manufacturing data sets, the processor being located at the control system (col. 7, lines 44-61).

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an

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international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

5. Claims 4, 11, 13, and 14 are rejected under 35 U.S.C. 102(e) as being anticipated by Miller et al. U.S. Patent 6,556,884. Referring to claim 4, Miller discloses a system for managing electronics manufacturing data (col. 2, lines 36-44) comprising: a processor (col. 2, lines 45-64); a data storage device operably connected to the processor, the data storage device storing manufacturing standardization data and a plurality of electronic manufacturing data sets, each of the plurality of electronic manufacturing data sets corresponding to a local manufacturing process (col. 7 and 8, lines 53-67 and 1-4); and a difference editor executable on the processor to display differences between at least one of the electronic manufacturing data sets and the manufacturing standardization data (col. 7 and 8, lines 53-67 and 1-4). The data storage device includes a server for providing the manufacturing standardization data (Fig. 1, 130). The Office interprets the computer system to be a processor and server for storing manufacturing data. Miller discloses the data storage device including a central server for providing the manufacturing standardization data (Fig. 1, 130), a first control system for providing a first of the plurality of electronic manufacturing data sets, and a second control system for providing a second of the plurality of electronic manufacturing data sets (col. 4, lines 21-33).

Referring to claim 11, Miller discloses a method for managing of electronics manufacturing data, in which the data comprises non-local data (Fig. 1, 117) and local data (Fig. 1, 115), comprising the steps of: permitting non-local electronics manufacturing data to be modified by a first set of persons (col. 5, lines 37-60 and Fig. 1, 115); permitting local

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electronics manufacturing data to be modified by a second set of persons (col. 5, lines 37-60); and permitting a comparison between local electronics manufacturing data and non-local electronics manufacturing data wherein the first and second sets of persons are not identical (col. 6, lines 10-23). Referring to claims 13 and 14, the method as recited in claim 11 wherein the displaying step includes displaying a graphical representation of an electronic component and highlighting the differences (col. 7 and 8, lines 53-67 and 1-4). The Office interprets the computer system with the monitor shown in Fig. 1 as displaying all manufacturing data including graphically displaying differences between data.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 15-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miller et al. as applied to claims 11, 13, and 14 above, and further in view of Cullen et al. U.S. Patent 5,805,572. Although Miller discloses displaying manufacturing data differences, Miller does not expressly disclose displaying lead information of an electronic component. Cullen discloses using lead information for inspecting and placing lead devices (col. 6, lines 27-32). Cullen also discloses a manufacturing system and method being applied to printed circuit board assembly lines (col. 1, lines 9-18). The manufacturing system uses a controller controlled by

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manufacturing data (col. 8, lines 41-44) and a placement machine for placing components on a printed circuit board (col. 1, lines 9-18).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to monitor and display lead information for Miller's semiconductor production line monitoring method and apparatus invention. One of ordinary skill in the art would have been motivated to do this since Cullen discloses lead information for device placement and the inspecting of circuit boards as being vital for quality control and increasing manufacturing efficiency (col. 1, lines 38-61). It would have been obvious to apply Miller's invention to printed circuit boards since it is commonly known that the scope of semiconductor manufacturing includes printed circuit board manufacturing, as Miller discloses (col. 10 and 11, lines 66-67 and 1-13).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles R Kasenge whose telephone number is 703 305-8592. The examiner can normally be reached on Monday through Friday, 8:30 - 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Leo Picard can be reached on 703 308-0538. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

April 30, 2004
CK

A handwritten signature in black ink, appearing to read "L. P. Picard", written in a cursive style.

LEO PICARD
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100